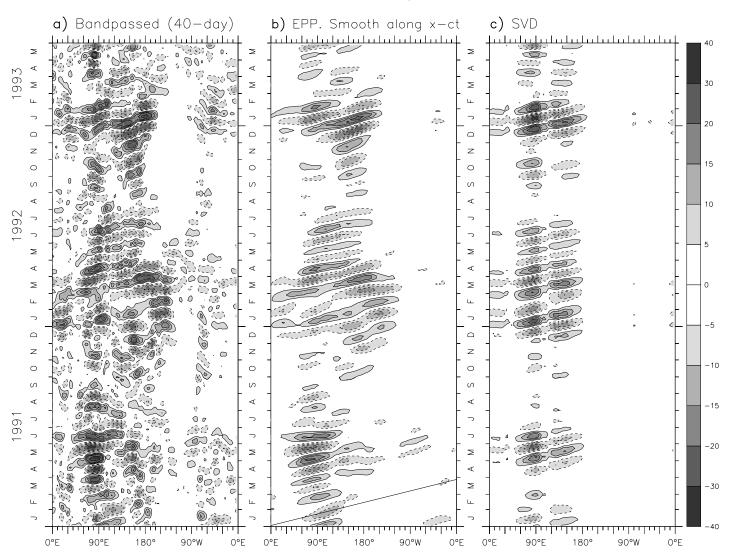
OLR intraseasonal representations



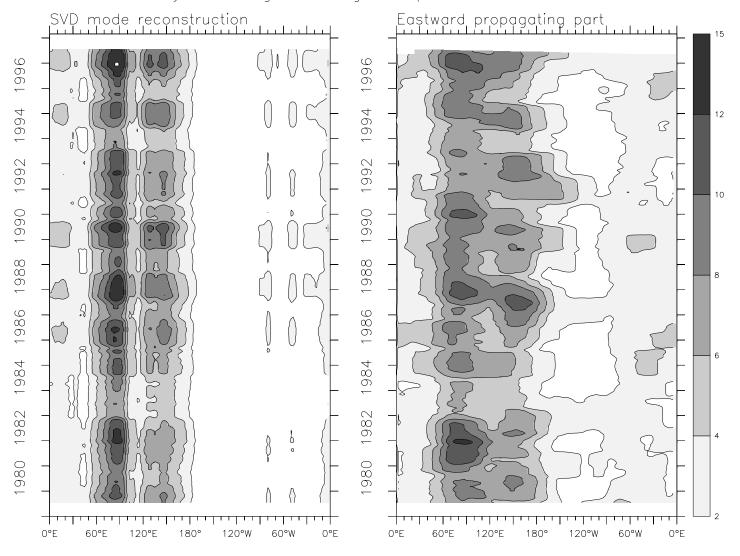
EPP: $c=5.5 \text{ m s}^{-1}$ (slant line). Smoothing half-power=87° longitude

Figure 1. Example of representations of intraseasonal OLR along the equator during 1991 through mid-1993. a) Bandpassed OLR. b) EPP representation, smoothed along (x - ct), where $c=5.5 \,\mathrm{m\,s^{-1}}$ (slant line), and the smoothing scale was 87° longitude. c) SVD reconstruction based on the first mode pair. Units are W m⁻², anomalies greater than 5 W m⁻² are shaded, with solid (dashed) contours showing positive (negative) OLR anomalies.

Propagating SVD Mode pair 1 of Intraseasonal OLR OLR bandpassed to 28-72 day periods (40 day central period) 15°N 10°N 5°N Mode 0° 5°S 10°S 15°S 60°E . 120°W 60°W 120°E 180° 10°N Mode 0° 5°S 10°S 15°S 60°W 60°E 120°E 180° 120°W 1.0 Mode 1 0.8 Along Equator Mode 2 0.6 0.4 0.2 0.0 -0.2 -0.4 -0.6 120°E 0°E 60°E 180° 120°W 60°W 0°E

Figure 2. Spatial patterns of the lowest SVD mode pair for bandpassed OLR. Top: SVD mode 1; middle: SVD mode 2; bottom: profiles of modes 1 and 2 along the equator. Contour interval 0.1 in dimensionless units, with the zero contour omitted.

Interannual RMS of intraseasonal OLR from SVD and E-ward propagation $1-year\ running\ RMS\ along\ the\ Equator.$ Units: W m $^{-2}$



40-day bandpass. E-ward part smoothed (21) along x-ct, $c=5.5 \text{ m s}^{-1}$

Figure 3. Interannual running RMS of intraseasonal OLR along the equator (see text for definition). Left: The RMS for reconstructed OLR using the lowest SVD mode pair. Right: The RMS for the "eastward-propagating part" of bandpassed intraseasonal OLR (see text).

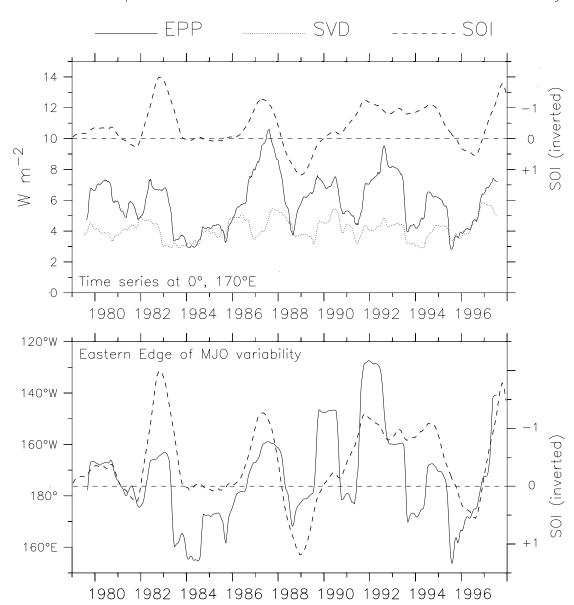


Figure 4. Time series of the two indices of interannual RMS of intraseasonal OLR compared to the SOI. In each plot the solid line is the EPP index, the dotted line is the SVD index, and the dashed line is the SOI, inverted so that El Niño events appear positive on the plot; the scale for SOI is at right and the horizontal line is zero SOI. Top: Time series at 0°, 170°E. The units of the indices are W m⁻² and the scale is at left. Bottom: Time series of the eastern edge of strong MJO variability from the EPP index. The eastern edge is defined as the 4 W m⁻² contour in Fig. 3, and its longitude scale is at left.